Product Datasheet

E-Cadherin Antibody (7H12) - BSA Free
NBP2-19051

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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Reviews: 7 Publications: 29

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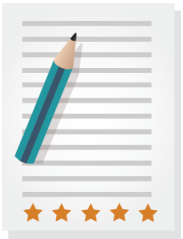
Updated 10/23/2024 v.20.1



NBP2-19051

E-Cadherin Antibody (7H12) - BSA Free

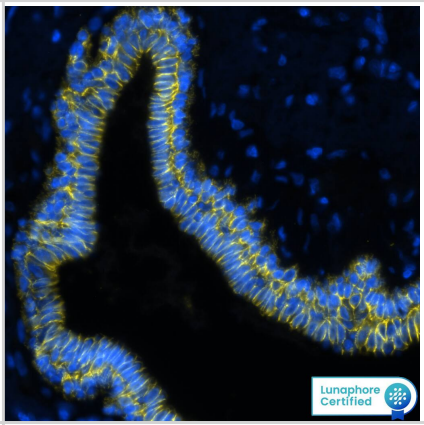
Product Information	
Unit Size	0.1 ml
Concentration	This product is unpurified. The exact concentration of antibody is not quantifiable.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	7H12
Preservative	0.03% Sodium Azide
Isotype	IgG1
Purity	Unpurified
Buffer	Ascites
Target Molecular Weight	135 kDa

Product Description	
Host	Mouse
Gene ID	999
Gene Symbol	CDH1
Species	Human, Mouse, Monkey
Reactivity Notes	Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Mouse-On-Mouse blocking reagent may be needed for IHC and ICC experiments to reduce high background signal. You can find these reagents under catalog numbers PK-2200-NB and MP-2400-NB. Please contact Technical Support if you have any questions.
Marker	Epithelial Cell Marker, Adherens Junctions Marker
Immunogen	Purified recombinant fragment of human E-Cadherin expressed in E. Coli.

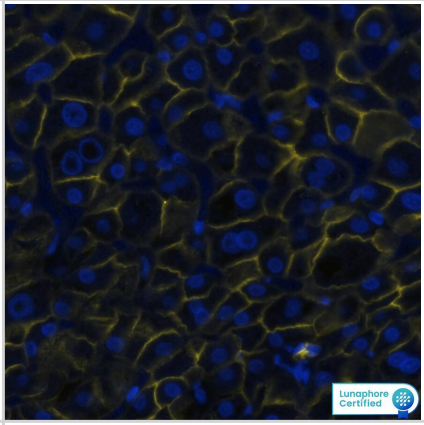
Product Application Details	
Applications	Western Blot, ELISA, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Multiplex Immunofluorescence
Recommended Dilutions	Western Blot 1:500-1:2000, Flow Cytometry 1:200-1:400, ELISA 1:10000, Immunohistochemistry 1:200-1:1000, Immunocytochemistry/ Immunofluorescence 1:10-1:500, Immunohistochemistry-Paraffin 1:200-1:1000, Multiplex Immunofluorescence 1:1000
Application Notes	Use in ICC/IF reported in scientific literature (PMID: 20605541).

Images

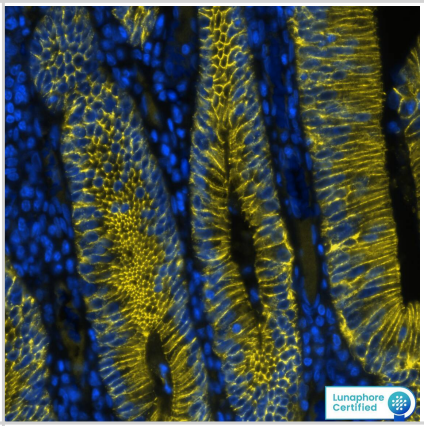
E-Cadherin was detected in immersion fixed paraffin-embedded sections of human breast using Mouse Anti-Human E-Cadherin Monoclonal Antibody (Novus Catalog # NBP2-19051) at 1:1000 at 37 ° Celsius for 4 minutes. Before incubation with the primary antibody, tissue underwent an all-in-one dewaxing and antigen retrieval preprocessing using PreTreatment Module (PT Module) and Dewax and HIER Buffer H (pH 9). Tissue was stained using the Alexa Fluor™ Plus 647 Goat anti-Mouse IgG Secondary Antibody at 1:200 at 37 ° Celsius for 2 minutes. (Yellow; Lunaphore Catalog # DR647MS) and counterstained with DAPI (blue; Lunaphore Catalog # DR100). Specific staining was localized to the membrane. Protocol available in COMET™ Panel Builder.



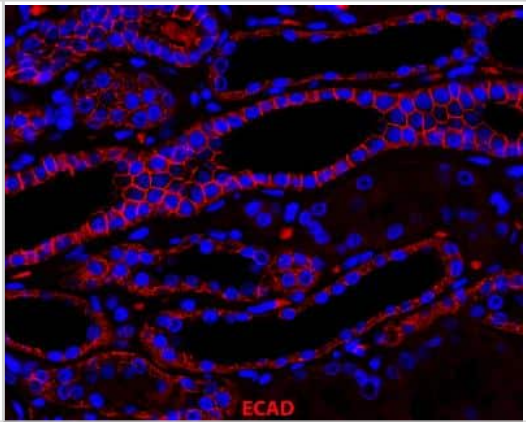
E-Cadherin was detected in immersion fixed paraffin-embedded sections of human liver using Mouse Anti-Human E-Cadherin Monoclonal Antibody (Catalog # NBP2-19051) at 1:1000 at 37 ° Celsius for 4 minutes. Before incubation with the primary antibody, tissue underwent an all-in-one dewaxing and antigen retrieval preprocessing using PreTreatment Module (PT Module) and Dewax and HIER Buffer H (pH 9). Tissue was stained using the Alexa Fluor™ 647 Goat anti-Mouse IgG Secondary Antibody at 1:200 at 37 ° Celsius for 2 minutes. (Yellow; Lunaphore Catalog # DR647MS) and counterstained with DAPI (blue; Lunaphore Catalog # DR100). Specific staining was localized to the membrane. Protocol available in COMET™ Panel Builder.

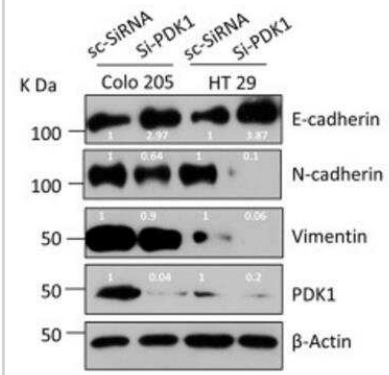
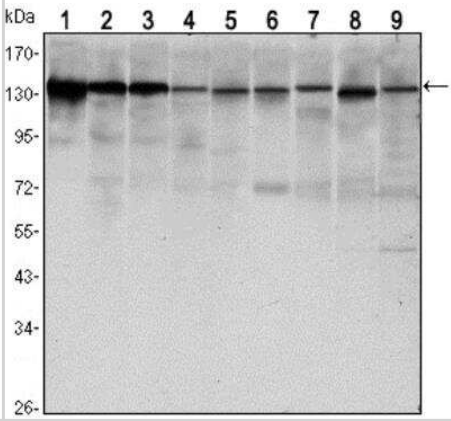
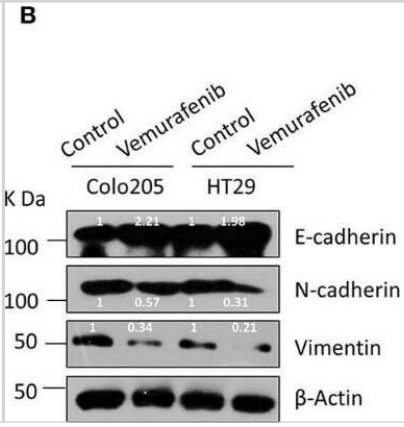


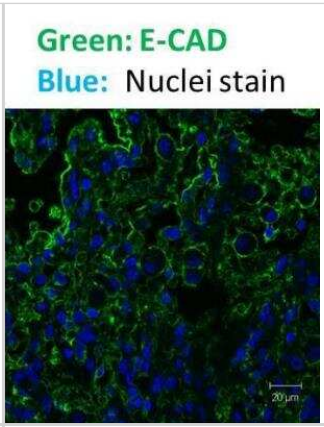
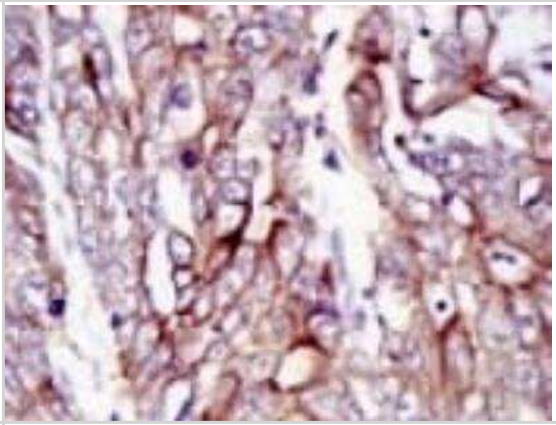
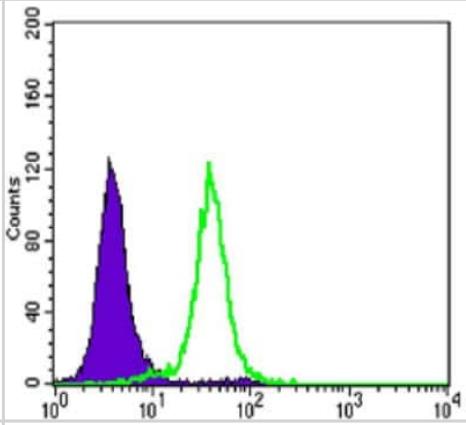
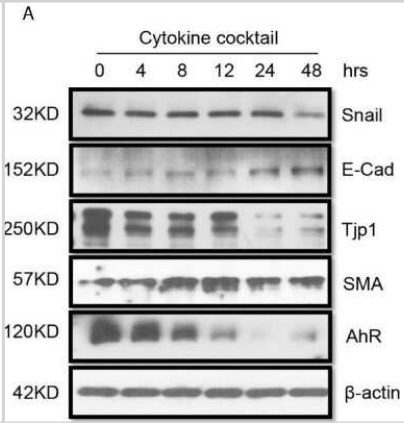
E-Cadherin was detected in immersion fixed paraffin-embedded sections of human colon cancer using Mouse Anti-Human E-Cadherin Monoclonal Antibody (Catalog # NBP2-19051) at 1:1000 at 37 ° Celsius for 4 minutes. Before incubation with the primary antibody, tissue underwent an all-in-one dewaxing and antigen retrieval preprocessing using PreTreatment Module (PT Module) and Dewax and HIER Buffer H (pH 9). Tissue was stained using the Alexa Fluor™ 647 Goat anti-Mouse IgG Secondary Antibody at 1:200 at 37 ° Celsius for 2 minutes. (Yellow; Lunaphore Catalog # DR647MS) and counterstained with DAPI (blue; Lunaphore Catalog # DR100). Specific staining was localized to the membrane. Protocol available in COMET™ Panel Builder.

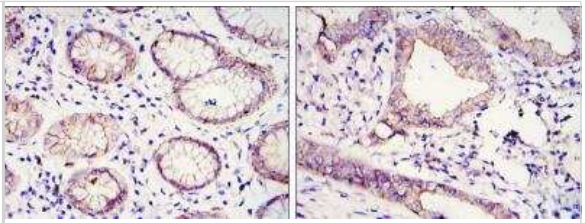
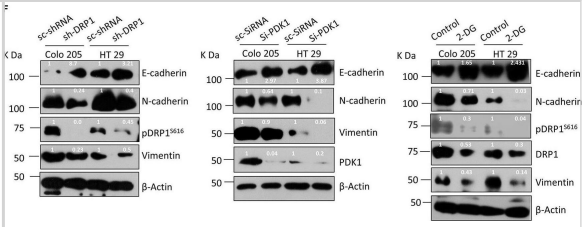


Immunohistochemistry-Paraffin: E-Cadherin Antibody (7H12) [NBP2-19051] - Human kidney distal tubules stained with E-CAD antibody. Secondary antibody: Donkey anti-Mouse Alexa Fluor 555. Imaging with a 40x objective from Zeiss Observer microscope with Apotome2. Image from verified customer review.



Western Blot: E-Cadherin Antibody (7H12) [NBP2-19051] - Western blots showing a reduction in epithelial mesenchymal transition (EMT) markers upon PDK1 knockdown in Colo205 and HT29 cells using E cadherin (NBP2-19051), N cadherin (NBP1-48309) and B-actin antibody (NB600-501). The corresponding secondary antibodies used were either goat anti-rabbit IgG-HRP (NB7160) or goat anti-mouse IgG-HRP (NB7539). Image collected and cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/33738242) licensed under a CC-BY license.	
Western Blot: E-Cadherin Antibody (7H12) [NBP2-19051] - Analysis of E-Cadherin in LNCAP (1), A431 (2), DU145 (3), PC-3 (4), MCF-7 (5), PC-12 (6), NIH/3T3 (7), C6 (8) and COS7 (9) cell lysate.	
Immunocytochemistry/Immunofluorescence: E-Cadherin Antibody (7H12) [NBP2-19051] - ICC staining of E-Cadherin in human colon cancer sphere. Image from verified customer review.	
Western Blot: E-Cadherin Antibody (7H12) [NBP2-19051] - Mitochondrial fission regulates migration and invasion in BRAF^V600E CRC cells through glucose metabolic reprograming. Western blot showing a reduction in EMT markers upon vemurafenib treatment in BRAF^V600E cells. Image collected and cropped by CiteAb from the following publication (//pubmed.ncbi.nlm.nih.gov/33738242/) licensed under a CC-BY license.	

Immunocytochemistry/Immunofluorescence: E-Cadherin Antibody (7H12) [NBP2-19051] - Human colonic tissue was stained with E-Cadherin antibody. Image from verified customer review.	
Immunohistochemistry-Paraffin: E-Cadherin Antibody (7H12) [NBP2-19051] - IHC staining of E-Cadherin antibody in mouse colon cancer tissue. Antibody dilution 1:500. Image from verified customer review.	
Flow Cytometry: E-Cadherin Antibody (7H12) [NBP2-19051] - Analysis of Hela cells using E-Cadherin mouse mAb (green) and negative control (purple).	
Western Blot: E-Cadherin Antibody (7H12) [NBP2-19051] - Western blot analysis of function protein expression on primary human renal cortical epithelial cells challenged with cytokines. Primary human renal tubular epithelial cells are challenged with cytokine cocktail (15nM IFN gamma, 6nM TNF alpha, and 3nM IL1 beta). Expression of Snail, E-Cad, TJP1, SMA. AhR, IDO, KMO, KY, MHCI & II. Image collected and cropped by CiteAb from the following publication (//pubmed.ncbi.nlm.nih.gov/34305900/) licensed under a CC-BY license.	

Immunohistochemistry-Paraffin: E-Cadherin Antibody (7H12) [NBP2-19051] - IHC staining of E-Cadherin in gastric cancer tissues (left) and lung cancer tissues (right) with DAB staining.	
Mitochondrial fission regulates migration & invasion in BRAFV600E CRC cells through glucose metabolic reprograming. (A) Relative cell invasion post vemurafenib treatment in BRAFV600E cells (n=3, mean ± SEM); statistical analysis was done by unpaired t-test followed by Welch's correction assuming unequal variance in means, corresponding p values shown. (B) Western blot showing a reduction in EMT markers upon vemurafenib treatment in BRAFV600E cells. Relative cellular invasion post (C) DRP1 silencing, (D) PDK1 silencing, & (E) 2-deoxyglucose treatment in Colo205 & HT29 cells (n=3, mean± SEM); statistical analysis was done by unpaired t-test followed by Welch's correction assuming unequal variance in means, corresponding p values shown. (F) Western blots showing a reduction in epithelial mesenchymal transition (EMT) markers upon DRP1 silencing, PDK1 knockdown, & 2-DG treatment in Colo205 & HT29 cells. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/33738242), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

Publications

M Song, OO Yeku, S Rafiq, T Purdon, X Dong, L Zhu, T Zhang, H Wang, Z Yu, J Mai, H Shen, B Nixon, M Li, RJ Brentjens, X Ma Tumor derived UBR5 promotes ovarian cancer growth and metastasis through inducing immunosuppressive macrophages Nature Communications, 2020-12-08;11(1):6298. 2020-12-08 [PMID: 33293516] (Western Blot)

Kathryn Burge, Adam Wilson, Hala Chaaban In Vitro Apical-Out Enteroid Model of Necrotizing Enterocolitis Journal of visualized experiments : JoVE 2022-06-08 [PMID: 35758712]

Yu Z, Dong X, Song M et al. Targeting UBR5 inhibits postsurgical breast cancer lung metastases by inducing CDC73 and p53 mediated apoptosis International journal of cancer 2023-10-19 [PMID: 37855385]

Tatiana Kleimenova, Victoria Polyakova, Natalia Linkova, Anna Drobintseva, Dmitriy Medvedev, Alexander Krasichkov, Masao Ichikawa, Osamu Hiraike, Koichi Shinohara, Kuniaki Ota The Expression of Kisspeptins and Matrix Metalloproteinases in Extragenital Endometriosis Biomedicines 2024-01-01 [PMID: 38255200]

Padder RA, Bhat ZI, Ahmad Z et al. DRP1 Promotes BRAF(V600E)-Driven Tumor Progression and Metabolic Reprogramming in Colorectal Cancer Frontiers in Oncology 2021-03-02 [PMID: 33738242] (Western Blot)

McMichael BD, Perego MC, Darling CL et al. Long-term arsenic exposure impairs differentiation in mouse embryonal stem cells Journal of Applied Toxicology 2021-07-01 [PMID: 33124703] (Immunohistochemistry)

Yano K, Choijookhuu N, Ikenoue M et al. Spatiotemporal expression of HMGB2 regulates cell proliferation and hepatocyte size during liver regeneration Scientific reports 2022-07-13 [PMID: 35831365] (IHC-P, Mouse)

Karim S, Burzangi AS, Ahmad A Et al. PI3K-AKT Pathway Modulation by Thymoquinone Limits Tumor Growth and Glycolytic Metabolism in Colorectal Cancer Int J Mol Sci 2022-02-26 [PMID: 35216429] (WB, Human)

Details:
Citation using the HRP version of this antibody.

Jhan JH, Hsu WC, Lee YC et al. MicroRNA-375-3p Suppresses Upper Tract Urothelial Carcinoma Cell Migration and Invasion via Targeting Derlin-1 Cancers 2022-02-10 [PMID: 35205628] (WB, Human)

Zhang X, Tanwar VS, Jose CC Et al. Transcriptional repression of E-cadherin in nickel-exposed lung epithelial cells mediated by loss of Sp1 binding at the promoter Molecular carcinogenesis 2021-11-02 [PMID: 34727382]

Lassiter R, Merchen Td, Fang X, Wang Y Protective Role of Kynurenine 3-Monooxygenase in Allograft Rejection and Tubular Injury in Kidney Transplantation Frontiers in immunology 2021-07-07 [PMID: 34305900] (IHC-P)

Song M, Wang C et al. Targeting ubiquitin protein ligase E3 component N-recognin 5 in cancer cells induces a CD8+ T cell mediated immune response. Oncoimmunology 2020-05-05 [PMID: 32363114] (WB, Mouse)

More publications at http://www.novusbio.com/NBP2-19051

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NB800-PC8	NIH 3T3 Whole Cell Lysate
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-97005-0.5mg	Mouse IgG1 Isotype Control (MG1)

Limitations
This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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